ABSTRACT OF THE DISCLOSURE

A method and architecture for calculating input values for use in automated analysis and design during the various stages of the design process includes smart defaults. Specific parameter types are defined, some of which are adapted to be specified, or if not specified, calculated by the smart defaults. A tree structure is provided for determining parameter relationships in order to calculate parameter values. The tree structure uses a specific routine to call a smart default each time a parameter value is to be determined, and values are thereby calculated independent of the order of the data inputs.